

22 CLANDESTINE LABORATORIES	Page 1 of 2
Division of Forensic Science CONTROLLED SUBSTANCES TRAINING MANUAL	Amendment Designator:
	Effective Date: 8-December-2003
<p style="text-align: center;">22 CLANDESTINE LABORATORIES</p> <p>22.1 Objectives</p> <p>22.1.1 To familiarize the trainee with syntheses routinely used in clandestine laboratories.</p> <p>22.1.2 The completion of this section is not required in order for the trainee to become a qualified examiner.</p> <p>22.2 Modes of Instruction</p> <p>22.2.1 Self-directed study through reading assignments</p> <p>22.2.2 Practical exercise</p> <p>22.3 Reference</p> <p>22.3.1 Weaver, K. and Yeung, E. <i>An Analyst's Guide to the Investigation of Clandestine Laboratories, 3rd edition</i>. Health Protection Branch, Ontario Region Health Canada, 1995.</p> <p>22.3.2 <i>Clandestine Lab Basic Guide</i>, presented at the 12th Annual Clandestine Laboratory Investigating Chemists Training Seminar, 2002.</p> <p>22.3.3 Ely, Roger, <i>et al. A Review of the Syntheses and Analyses of Phenyl-2-propanone, Amphetamine, and Methamphetamine</i>. Clandestine Laboratory Investigating Chemists, 1995.</p> <p>22.3.4 Clandestine Laboratory Investigating Chemists monographs.</p> <p>22.3.5 Strike. <i>Total Synthesis II</i>, San Antonio, TX: Panda Ink, 1999.</p> <p>22.3.6 Uncle Fester. <i>Advanced Techniques of Clandestine Psychedelic & Amphetamine Manufacture</i>. Port Townsend, WA: Loompanics Unlimited. 1998.</p> <p>22.4 Assignments</p> <p>22.4.1 Study questions and practical exercise</p> <p>22.5 Study questions</p> <p>22.5.1 Describe the difference between a controlled precursor and List 1 or 2 chemicals.</p> <p>22.5.2 Define the following terms:</p> <ul style="list-style-type: none"> • Precursor • Byproduct • Catalyst • Limiting reagent <p>22.5.3 Explain how an analyst should sample a liquid with three layers. What types of evidence would be important to sample?</p> <p>22.5.4 Discuss the importance of working closely with prosecutors and officers to decide the amount of analyses necessary.</p>	

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<p>22.5.5 List chemicals and starting materials which would indicate the various syntheses of PCP and methamphetamine described in questions 4.4.6.8 and 4.4.8.6. What byproducts would be expected from these syntheses and why?</p> <p>22.6 Practical Exercise</p> <p>22.6.1 Perform a synthesis procedure that is commonly encountered in clandestine laboratories (either methamphetamine or PCP are recommended).</p> <p>22.6.1.1 Take samples during the reaction process to monitor the progress.</p> <p>22.6.1.2 Determine the yield of the reaction.</p> <p>22.6.1.3 Attempt to identify all compounds in the product mixture.</p> <p>22.7 Modes of Evaluation</p> <p>22.7.1 Completion of the study questions</p> <p align="right">♦ End</p>	